

CLAIMS

1. A dewatering element for the wet end of a paper-making machine, said dewatering element having a sliding surface for contacting a forming screen, said sliding surface being made from a material that comprises an elastomeric polymer matrix and a filler added to said matrix at a level of 10 to 50 percent by weight, wherein the material has a hardness according to Shore A between 60 and 85.
2. The dewatering element of claim 1, wherein said elastomeric polymer matrix comprises a material selected from polyurethane, polyurea, styrene-butadiene rubber, ethylene propylene diene monomer (EPDM), nitrile rubber, natural or synthetic rubbers, polychloroprene, polyacrylates, fluorine-containing elastomers, thermoplastic elastomers and polysiloxanes.
3. The dewatering element of claim 2, wherein the polymer matrix comprises polyurethane.
4. The dewatering element of claim 1, wherein the filler is a low hardness filler.
5. The dewatering element of claim 1, wherein the filler is a solid lubricant.
6. The dewatering element of claim 1, wherein the filler comprises a material selected from poly(tetrafluoroethylene), talcum, powders of ultra high molecular weight polyethylene (UHMWPE), clay (kaolin), calcium carbonate, boron nitride, molybdenum sulfide, calcium fluoride, titanium dioxide, titanium carbide, glass beads and ceramic beads.

7. The dewatering element of claim 4, wherein the filler is a low hardness filler selected from poly(tetrafluoroethylene) and talcum.
- 5 8. The dewatering element of any one of the preceding claims, wherein the filler is added at a level of 10 to 40 percent by weight, preferably 15 to 30 percent by weight.
- 10 9. The dewatering element of any one of the preceding claims, wherein the material for the sliding surface has a hardness according to Shore A between 70 and 80.